openreach

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Suppliers' Information Note

For The Openreach Network

Openreach Public Switched Telephone Network (PSTN):

Technical Characteristics of the Supplementary Services available on the Analogue Line Interface & Withdrawal Notification

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1. Scope

This Suppliers' Information Note (SIN) specifies those technical characteristics of the Supplementary Services available on an analogue line interface of the Public Switched Telephone Network (PSTN) provided by Openreach, delivered to a customer at the Network Termination Point.

Only those services that have an impact on the user interface have been listed.

In cases where the Network Termination Equipment (NTE) is mains powered, the conditions quoted in this SIN apply when mains power is being applied to the NTE. The conditions applicable when mains power is removed from the NTE may be different to those quoted in this SIN.

Much of the information contained in this SIN has been published previously in documents such as Openreach's product and service descriptions. .

Changes to the network that affect the correct working of terminal equipment designed to use the Openreach PSTN will be published in Openreach SINs. If the changes impact on the content of this document then it will be updated.

Openreach will withdraw the supplementary services described this SIN by end of January 2027 in line with the closure of the BT UK PSTN.

2. Introduction

2.1 Service Provision

Supplementary Services are provided to Openreach customers using the following methods:

a) by default provision, e.g. Reminder Call™, Caller Return 1471, Three Way Calling™, etc, and,

b) provided on demand, e.g. Call Waiting™, Call Minder®, BT Direct Connect™, etc.

2.2 Service Control

Individual service operation can be either customer controlled using Touch Tone™ keying (multi- frequency tone signalling digits) and/or Recall with the service operating codes listed in Annex A and Annex B, or added as a permanent feature, by the administration, to individual exchange lines.

Where there are differences between the services available to customers connected to access lines on System X, AXE 10 and UXD5 Digital Local Exchanges, or on BT's 21st century network (21CN), the differences are detailed in the Annexes.

> Note. The technical characteristics of the multi-frequency tone and Recall signals recognised by the Openreach network interface are given in SIN 351[1].

3. Supplementary services

The following is a list of those services having an impact on the user interface.

Calling Features

Call Barring™
Smart Divert™
BT Call Sign™
Call Waiting™
Caller Display™
Reminder Call

Caller Return 1471
BT Ring Back®
Three Way Calling
Prompted Ring Back
Call Diversion

Other Services

Anonymous Call Rejection
Raw Call Data
BT Direct Connect™
Call Forwarding
Call Minder ®
Called Party Answer
Calling Line Identity (CLI) Delivery
Basic Call Restriction (BCR)
Premium Call Restriction (PCR)
Route to 15x
159 Bank Fraud Reporting

Soft Dial Tone
Number Portability™
Remote Call Forwarding
Temporary out of Service
BT Answer 1571™ Wholesale 1571
Choose to Refuse™
Fixed Line SMS Service
Choose to Divert
Indirect Access Call Barring (IACB)
Route to Credit Control (RTCC)

4. Service Descriptions

4.1 Calling Line Identity (CLI) Delivery

Refer to Section 4.3 – Caller Display™.

4.2 Call Forwarding

Refer to Section 4.6 – Call Diversion and 4.7 – Smart Divert™.

4.3 Caller Display™

The Caller Display service is designed around the ability to offer Calling Line Identity (CLI) information to called customers, including customer control of the CLI release/withhold service - refer to SIN 227[3].

For a description of the interaction between Caller Display and Call Waiting, refer to Section 4.5.

4.4 Call Minder® & BT Answer 1571™⁑⁑Wholesale 1571

These exchange-based services answer calls and record messages directly, on no reply or engaged. If a message has been recorded while the line is engaged, they call the home number after 10 minutes and again after 30 minutes to invite the customer to listen to the message. Standard ringing is applied. Interrupted dial tone alerts the customer to a waiting message - refer to SIN 350 [4] Network Tones and Announcements.

Call Minder offers more facilities than those provided by BT Answer 1571/Wholesale 1571. If C2D is active on the line, only calls from specific CLIs, or class of CLIs, that have not been restricted by the CP or customer lists will be answered by Call Minder & BT Answer 1571.

4.5 Call Waiting™

Customers engaged on a call are alerted to another incoming call by a discrete tone while the caller receives voice announcements informing them of the call's status. This ensures that established incoming calls are not lost if the customer is prepared to answer the new incoming call. They can ignore the new incoming call, switch between the two calls or end the original call and receive ringing so that the new incoming call can be answered. If the Caller Display service and Call Waiting service are enabled on the same line then a second tone is received just after the first Call Waiting tone. The CLI of the Call Waiting caller can then be displayed mid-call on suitable Caller Display Customer Premises Equipment. . If C2D is active on the line, only calls from specific CLIs, or class of CLIs, that have not been restricted by the CP or customer lists will be presented as a waiting call.

4.6 Call Diversion

Customers can use their exchange line to program the serving exchange to divert incoming calls on that line to another number. They can also have them diverted on busy and on no reply. Once Call Diversion is activated, the serving exchange will return interrupted dial tone to indicate that the facility in enabled - refer to SIN 350[4] Network Tones and Announcements If C2D is active on the line, only calls from specific CLIs, or class of CLIs, that have not been restricted by the CP or customer lists will be diverted by Call Diversion.

4.7 Smart Divert™

Customers can call from their own exchange line, or a different line, to program the serving exchange to divert incoming calls to another number. They can also have them diverted on busy and on no reply. This facility ensures that customers receive and can directly answer all of their incoming calls. This also allows the customer a certain amount of personal mobility.

Once Smart Divert is activated, the serving exchange will return interrupted dial tone to indicate that the facility in enabled - refer to SIN 350[4] Network Tones and Announcements. If

C2D is active on the line, only calls from specific CLIs, or class of CLIs, that have not been restricted by the CP or customer lists will be diverted by Smart Divert.

4.8 Call Barring™

Customers can bar all incoming calls or outgoing calls in a variety of categories by choosing barring options, either by Customer Control or by Administration Control. A Personal Identification Number (PIN) is provided for security purposes. Dial tone is still received when going off-hook, however, Number Unobtainable tone is received after dialling those dial codes relevant to the barring options selected. Refer also to Section 4.13 - Choose to Refuse service, Section 4.17 - Anonymous Call Rejection, Section 4.25 Choose to Divert and Section 4.29 Indirect Access Call Barring.

4.9 BT Ring Back® & Prompted Ring Back

The BT Ring Back service, formerly known as Ring Back When Free, is a feature which, under customer control, automatically sets up a call to a previously dialled busy number when the called party becomes free, without the need for the calling party to redial. Ring Back will try to connect calls for a period of up to 45 minutes.

Callers to engaged numbers receive a combination of Number Busy Tone and a verbal announcement giving information on the availability of Ring Back, followed by Number Busy Tone. Calls to some numbers for which Ring Back cannot be used will just receive Number Busy Tone. An associated service, ring back inhibit, allows customers to prevent the use of BT Ring Back on calls to their number.

Once a BT Ring Back request has been placed and matures, the user receives a network ring back using a distinctive ringing cadence - refer to SIN 351 Annex A[1] Distinctive Ringing Cadence Type 2.

The Ring Back facility can be disabled on calls to a particular number at the request of the customer on that line.

4.10 BT Direct Connect™

The Direct Connect service allows for the immediate automatic routing of calls to any pre-programmed telephone number from a standard exchange line, on lifting the receiver.

No dialling tone will be returned to the user as the call is immediately set-up as though the user had dialled the call manually. Progress indication of the call will be as for basic call set-up.

> *Please note that due to software limitations in AXE10 exchanges, there may be restrictions if the pre-programmed number is a ported number on the same exchange. If Openreach is unable to provide the feature due to this limitation, the order will be rejected.*

4.11 BT Call Sign™

BT Call Sign allows customers to distinguish between incoming calls. An additional directory number is provided against the existing exchange line such that, when the additional number is called, a different ringing cadence is applied to the line- refer to SIN 351 Annex A[1] Distinctive Ringing Cadence Type 1.

Call Sign is offered subject to the availability of Call Sign numbers. Call Sign may not be compatible with some fax machines, and requires a telephone that responds to different ringing patterns. If C2D is active on the same line, incoming calls made to the call sign number will follow the same path as calls made to the main number and will be either diverted to the 1572 mailbox or connected in the normal way.

4.12 Caller Return 1471 & 1471 Erasure

Caller Return 1471 provide the Calling Line Identity, where available, of the last call received, both answered and unanswered, together with the corresponding date and time of day. Dialling 1471 gives access to this information, by way of voice announcements, and the ability to return the call.

The 1471 Erasure service is invoked by dialling 1475 and replaces the last number stored by Caller Return 1471 by a "Number withheld" message. The caller will either hear the Connection Not Admitted Indication (Number Unobtainable Tone) or a message saying, "the other person has hung up". On replacing the handset, the phone will emit one ring to confirm the erasure has been completed. Should the customer then dial 1471 again, they will hear the number withheld message.

> Note. In order to use the 1471 Erasure service the customer must release their CLI when dialling 1475 and must also receive the ring-back call which has a CLI set to "number withheld". Other services that prevent these two conditions will have to be temporarily disabled:

- customers with permanent CLI withhold will need to prefix the 1475 with 1470 in order to release their CLI;
- customers using Anonymous Call Rejection will need to prefix the 1475 with #227# then, following the ring-back, will then need to dial *227# to reactivate Anonymous Call Rejection;
- customers using either Smart Divert or Call Diversion will need to deactivate the facility otherwise the ring-back call will be diverted to the number that is currently receiving their calls, and the number in their 1471 number store will not be replaced.
- Customers using C2D will need to first allow through calls from withheld numbers before using this service. This can be done either the associated IVR platform or via your CP portal. Afterwards, the setting to restrict calls from Withheld numbers will then need to be re-applied.

4.13 Choose to Refuse™

The Choose to Refuse service (also known as Last Incoming Call Barring) provides the customer with a selective incoming call barring service by dialling 14258 and following a voice prompted menu. Dialling 14258 after ending an incoming call gives the option of barring any further calls from that particular line. It is also possible to key in and store a directory number to be barred, by use of a PIN.

4.14 Soft Dial Tone

Openreach intends to provide a very limited, outgoing only, PSTN service to be provided a) on working exchange lines when normal PSTN service is stopped and b) as the final element in the pro-active provision of service at green field sites i.e. ahead of a customer order. Soft Dial Tone (SDT) will be available for both residential and single-line business customers and will allow rapid re-provision of service at minimum cost.

4.15 Number Portability™

This service allows the customer to move between Network Operators and to retain their Directory Number. Services available from one Network Operator may not be available from another; a customer wishing to retain their services will need to clarify this with their new service supplier. The interface specification at the Network Terminating Point may differ.

4.16 Called Party Answer

Called Party Answer (CPA) is available as a suitable replacement product to support the types of end user Customer Equipment features that have traditionally used the Meter Pulse Facility. CPA is provided by default on Multi-Line Groups and by request for Single Lines.

CPA, using a line polarity reversal, indicates to customer equipment that the Called Party or the Called Party's network has answered. Using suitable equipment that can both detect the line reversal signal and analyse the digits called, customers can determine when charging has started for all directly dialled chargeable calls on the BT network and certain calls terminating on other networks.

Note. See SIN 351[1] and SIN 352[6] for details of line polarity.

4.17 Anonymous Call Rejection

Anonymous Call Rejection (ACR) enables users to block calls from callers who have 'withheld' their number. All calls from a caller with Permanent Number Withhold will be blocked; these customers may be able to release their number on a per call basis by using prefix '1470'. Calls from a caller using '141' will be blocked, the caller will be required to redial the number without using the '141' facility. Those whose calls have been blocked will hear a voice announcement advising them to redial the number without withholding their number.

4.18 Reminder Call

With Reminder Call customers can arrange to receive either a single reminder call or a series of regular reminder calls.

4.19 Fixed Line SMS Service

The Fixed Line SMS service provides fixed line telephones with SMS messaging capabilities that, from the user's perception, are analogous to the service available to mobile 'phone users. Refer to SIN 413[5] for further details.

4.20 Three Way Calling™

The Three Way Calling service allows End Users to speak to two other people at the same time, even if one of them is abroad. The customer can include or exclude either party at any time during the call. This is available on all single lines.

4.21 Choose to Divert

Choose to Divert (C2D) will give Communications Providers (CPs) and end customers the option to divert incoming calls of their choice, based upon a specific or class of CLI, with additional functionality to override the call diverts.

The use of a dialogue service will provide CPs with the ability to check the compatibility of the calling and network feature against the end customer’s current service.

The C2D calling and network feature will be supported on AXE10, System X and 21CN exchanges. C2D will not be supported on UXD5 exchanges. The C2D feature is compatible with WLR single line (Basic and Premium). C2D will be able to co-exist on WLR3 installations with 1571 or similar call minder mailboxes however it will be incompatible with existing Anonymous Call Reject (ACR) and Choose to Refuse (C2R) calling and network features.

Where a call sign number co-exists on the installation that choose to divert is also applied, incoming calls made to the call sign number will follow the same path as calls made to the main CLI and will be either diverted to the 1572 mailbox or connected in the normal way. Other incoming call features for example call diversion, call waiting etc. will only operate with calls that have not been diverted by the active C2D feature. If the Incoming Call Barring service is active, this will take priority. The C2D received calls list will therefore not be updated. If Caller Redirect is active on a line with C2D, this will also take priority. All incoming calls will therefore receive an announcement informing callers of the new telephone number.

C2D will be accessed by dialling 1572. This will provide the end customers with default access to an Openreach IVR platform to manage their service and retrieve any messages from the

1572 mailbox. Access to the 1572 service is only available from the telephone line upon which the C2D feature is active.

In addition to the Openreach default IVR platform, C2D will provide CPs with the option to alternatively integrate their own IVR platforms. The default IVR platform will use the Choose to Divert (C2D) dialogue service (API) to retrieve and update the end customer's feature / configuration data. When end customers dial the 1572 short code, the call will be connected and routed to the CP's IVR if previously setup. Once the feature is applied and active on a WLR3 PSTN installation there will be various configurable options:

1. CP list (max 10k numbers)– A list of numbers managed by the CP; numbers in this list will be diverted direct to the new 1572 mailbox
2. End customer list (max 100 numbers) – A list of numbers configured direct by the end customer; calls from these numbers will also be diverted to the 1572 mailbox
3. Call type - End customers will be able to choose to divert Withheld, Unavailable or International CLIs. They will be able to choose to switch each of the three call types on/off individually. Callers with a call type selected for diversion will be diverted to the 1572 mailbox.
4. Do not disturb (DND) setting – when activated, calls will either be diverted to normal voicemail or if not active an announcement will be played. However any incoming call where the CLI is present on a restricted call list will be diverted to the 1572 mailbox. The DND function will be able to be set either via the IVR to be switched on and off directly by the end customer or the API (XML from CP) if the timed setting / schedule is required.
5. VIP list (max 50 numbers)– this will provide 2 options:
    a. Allow the end customer to add numbers to this list which will override any numbers that are diverted in the CP list.
    b. Set an additional marker against a given CLI that will override any DND function in place.

NOTE: Dialling 1475 will not directly remove the last received call from the IVR last number called list. This can be achieved via a CP portal and the associated XML calls if required.

4.22 Caller Redirect

When a customer moves to another communications provider, or to a new exchange area, they may not be able to retain their existing number. This feature tells callers who dial the customer's original number that they have a new one. The caller isn't charged. This service is available following cessation or renumbering when the number is not being used as part of a new installation and provides an announcement informing callers of your new telephone number. It does not redirect the call.

4.23 Basic Call Restriction (BCR)

Basic Call Restriction (BCR) limits outgoing calls to 10 dialled numbers and is only available to customers who are deemed to be "vulnerable" on mental health grounds, with conditions such as dementia. The service can be used to prevent the end customer from making repeated calls to numbers that are not on the allowed 10 number dialling list.

The CP must verify that the customer meets the criteria to have the BCR service, as detailed in the WLR3 Calling and Networks Product Description. The feature is ordered via the Openreach Welfare Team, using the pro-forma detailed in the customer service plan. The BCR dialled number list would typically include numbers for a doctor, a social worker/carer, family and friends or a care line/pendant alarm monitoring centre.

In addition to the 10 dialled number calling restriction provided by BCR, calls can also be made to the emergency services (999 and 112) and to the CP's provision/repair service (15x). Incoming calls are not affected.

Please note:-

1. Basic Call Restriction is not suitable if more than ten numbers often need to be called or if any of the ten BCR dialled numbers often need changing. BCR dialled numbers can only be changed once every three months.
2. It is advisable that the CP remove the BT Answer 1571/Call Minder service before the BCR service is applied to the line. This is to prevent "dial though" or "side stepping" of the BCR service as BT Answer 1571/Call Minder allows customers to return a call to the number (CLI) supplied when a voicemail message was deposited.
3. The use of Call Return 1471 is automatically disabled when BCR is provided and enabled when BCR is removed. This happens to also prevent "dial through" as customers can press "3" to return a missed call where the number (CLI) is available.
4. Outgoing Call barring may be present on the line at the same time as BCR. If outgoing call barring is in operation, calls to any of the ten BCR dialled numbers will only be possible if allowed under the selected call barring option.
5. BCR dialled numbers on the pro-forma must be supplied in full national number format (dialling code + local number).
6. The full dialling code + local number shall be used when calling a number on the BCR dialled number list.
7. The BCR dialled numbers supplied must be valid customer numbers that are capable of being dialled and cannot include feature activation codes or "*" and "#" digits.
8. There is a limit of 10 lines per BT local exchange that can have the BCR service provided due to call routing restrictions. The orders will be processed on a first come first serve basis.
9. BCR cannot co-exist on the same line with Indirect Access Call Barring (IACB). The CP must therefore first remove IACB before placing an order for BCR. Otherwise, the order for BCR will be rejected.
10. BCR and PCR cannot be present on the same line at the same time.

4.24 Premium Call Restriction (PCR)

Premium Call Restriction (PCR) bars calls to 123 (Speaking Clock) and 118xxx numbers (Directory Enquires). This feature is only available to customers who are deemed to be "vulnerable" on mental health grounds, with conditions such as dementia. It works with, and can be used to supplement, other outgoing call barring options.

The CP must verify that the customer meets the criteria to have the PCR service as detailed in the WLR3 Calling and Networks Product Description. The feature is ordered via the Openreach Welfare Team using the pro-forma detailed in the customer service plan.

Incoming calls are not affected but the 'Choose to Refuse' service cannot be active on the line at the same time as PCR. The CP must remove 'Choose to Refuse' from the line before a request to apply PCR will be accepted. 'Choose to Divert' however can exist on the same line at the same time as PCR. Additionally, PCR cannot be present on the line at the same time as Indirect Access Call Barring (IACB). The CP must therefore remove IACB from line before placing an order from PCR. Otherwise, the order for PCR will be rejected.

When PCR co exists on an installation with another OCB option, it will provide an additional filter to stop calls to 123/118 numbers. If outgoing call barring is in operation at the same time as PCR, PCR will stop calls to 118/123 only if they are not stopped by the chosen outgoing call barring option.

PCR and BCR cannot be active on the same line at the same time.

4.25 Indirect Access Call Barring (IACB)

Indirect Access Call Barring Allows a CP to protect call revenues by rejecting outgoing call attempts made using Indirect Access codes. If a customer dials an Indirect Access code on a line with IACB active, the call is routed to number unobtainable tone. The feature can be ordered on a per exchange line basis.

4.26 Raw Call Data

Provides key information on incoming call traffic which the CP can use to improve the quality of service to end customers. This feature can provide data on calls not answered, engaged calls, call diverts, calls offered and network failures. The information is available on all numbers associated with the customer's main billing number, as a daily Comma Separated Value (CSV) file.

Please note that this feature is not compatible with Caller Redirect and Payphone installations.

4.27 Remote Call Forwarding

When an end customer ceases service and changes communications provider, or has a line renumbered, you can use this feature to divert calls to an alternative number. You'll probably find that the majority of these end customers have moved to new exchange areas and therefore cannot retain their existing numbers.

Up to 8 calls can be diverted simultaneously, or up to 12 on a System X exchange. Callers pay the normal price. The CP will be charged for the diverted leg of the call, based on the destination, and can invoice end customer as they see fit.

4.28 Temporary out of Service (ToS)

Once you apply this feature, end customers cannot make or receive any calls on the line. You'll still be charged rental while the line remains out of service. When you remove this feature, we'll restore the line to its original condition.

4.29 Route to Credit Control (RTCC)

The RTCC service is a network-based calling and network feature that automatically connects end customer to the CP's help desk when the end customer attempts to make an outgoing call (including calls via 1471). CPs would typically use RTCC to inform a customer that they have exceeded their credit limit, or that the customer must make payments before their service can be resumed.

CPs will need to give a single, pre-defined number for routing calls to the RTCC service. This number must be a freephone number.

If RTCC is applied on a WLR3 line, the end customer will still be able to make calls to the following types of number: calls to Emergency Services (999, 112, 18000), 0800, 0808, 150, 151, 152, 154, 116, 076002, 076232, 076593, 076596, 076599, 12823, 17070, 175, 176, 195, and 198 numbers.

4.30 Route to 15x

This feature allows a CP's own service teams to deal directly with customers who dial 150, 151, 152 or 154. The calls will route to a specific number of the CPs choice which is set up as part of the service establishment process. If the CP selects not to use this service, end customers dialling 150, 151, etc. will hear an announcement telling them that the number cannot be used on their line and advise them to contact the CP's support centre.

4.31 159 Bank Fraud Reporting

This calling and network feature will be available from 4 May 2021 as part of a Proof of Concept (PoC) for a period of 12 months. Feedback from the Proof of Concept will be shared with industry through the trial log at the monthly CFPCG meetings.

The 159 WLR3 calling and network feature is promoted by the Global Cyber Alliance, to allow people to report suspected fraud/theft directly to their bank. The 159 service will sit alongside the existing ActionFraud service (0300 123 2040) used for general cybercrime reporting to the police.

159 is a Type C access code only diallable initially on the WLR3 PSTN lines, ISDN, multi-line analogue and payphones, on all exchange types.

After dialling 159, end customers will be routed through to a white labelled IVR platform that will then forward the call to the fraud department of their chosen bank. If a bank is not participating in the service, the end customer will need to make contact using the method provided by their bank.

There is no Openreach connection charge for the calling and network feature however calls to 159 will be charged at a national rate against the WLR line default calls package (Wholesale Calls Line Associated (WCLA)). [1]

No call diversions to 159 will be allowed and calls to the 159 calling and network feature can be barred under the National Rate call barring option. Calls to 159 will not be connected via the 100 Operator, Directory Enquiry services (118xxx/195) or the Relay UK platform (18001/18002).

BT's version of the 159 service may be made available at a later date via carrier interconnect. The Global Cyber Alliance is though also communicating its request to other carriers and offering the opportunity to build the service on their own network.

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[1] Please contact BT Enterprise for further information or impact on your calls package

5. Glossary

21CN	BT's 21st century network
ACR	Anonymous Call Rejection
API	Application Programming Interface
BCR	Basic Call Restriction
C2D	Choose to Divert
CLI	Calling Line Identity
CP	Communication Provider
CPA	Called Party Answer
CPS	Carrier Pre-selection
C2D	Choose to Divert
DDI	Direct Dialling In
DEL	Direct Exchange Line
DN	Directory Number
ECR	Enhanced Call Return
EOI	Equivalence of Inputs
IACB	Indirect Access Ball Barring
IVR	Interactive Voice Response
NTE	Network Termination Equipment
PCR	Premium Call Restriction
PIN	Personal Identification Number
RTCC	Route to Credit Control
PRB	Prompted Ring Back
PSTN	Public Switched Telephone Network
SDT	Soft Dial Tone
SIN	Suppliers' Information Note
SMS	Short Message Service
SX	System X exchange
SY	AXE10 exchange
TIG	Technical Interface Guide
ToS	Temporary out of Service
UXD 5	Unit eXchange Digital Type 5
WCLA	Wholesale Calls Line Associated
WLR3	Wholesale Line Rental Version 3
XML	Extensible Markup Language

6. References

Ref.		Title
[1]	**SIN 351**	BT Public Switched Telephone Network (PSTN): Technical Characteristics of the Single Analogue Line Interface.
[2]	**not used**	
[3]	**SIN 227**	CDS Calling Line Identification Service – Service Description.
[4]	**SIN 350**	BT Public Switched Telephone Network (PSTN): Network Tones and Announcements
[5]	**SIN 413**	Fixed Line SMS Service, Service Description and Interface Specification
[6]	**SIN 352**	BT Public Switched Telephone Network (PSTN): Technical Characteristics of the Multi-Line Analogue Line Interface

The above BT SINs are available at https://www.openreach.co.uk/orpg/home/helpandsupport/sins/sins.do

7. History

TIG 7 Issue 1	October 1998	First published
TIG 7 Issue 2	April 1999	Addition of BT Call Sign service. Inclusion of additional operating codes. Enhanced UXD5 capabilities.
TIG 7 Issue 3	July 1999	Addition of Enhanced Call Return.
TIG 7 Issue 4	August 1999	Addition of SDT, PRB and Choose to Refuse services.
TIG 7 Issue 5	August 1999	Addition of Homemover Redirect service. Cessation of Code calling on UXD5 from 1/12/99.
TIG 7 Issue 6	September 1999	Amended description of Choose to Refuse service in clause 4.
TIG 7 Issue 7.0	February 2000	Homemover Redirect renamed Mover Redirect and description amended. Amended dates for introduction of Choose to Refuse, Anonymous Call Rejection and Enhanced Caller Return. Entry for Enhanced Caller Return in Annex A "Notes" corrected to align with the clause 4 service description.
SIN 354 Issue 1.0	March 2001	Document re-issued as SIN 354 with editorial changes. Mover Redirect™ removed. MPF withdrawal statement removed. Non Enhanced UXD5 reference removed.

SIN 354 Issue 2.0	March 2002	Entries for BT Ring Back and Call Waiting modified. “Recall” entry deleted (to be moved to SIN 351). Descriptions of Caller Return 1471, Reminder Call & Charge Advice added to complement information in Annexes. 1471 Erasure added. Editorial changes.
SIN 354 Issue 3.0	September 2003	Reference for Distinctive Ringing characteristics changed from SIN 249 to SIN 351 Annex A. Call Diversion renamed Smart Divert. Call Minder clause expanded to include BT Answer 1571. Enhancements to UXD 5 capabilities incorporated. “Select Services” changed to “BT Calling Features”.
SIN 354 Issue 3.1	July 2005	"Fixed Line SMS Service" and reference to SIN 413 added.
SIN 354 Issue 4.0	July 2006	Withdrawal notification added for Charge Advice, Night Busying, analogue DDI and Meter Pulse Facility. Called Party Answer added Call Diversion added to Service Descriptions and Smart Divert entry amended to add remote control facility. Column for 21CN supplementary services added to Annexes. Call Diversion replaces Smart Divert in Annexes where there is no remote control. "Smart Divert – on busy and no reply" added to Annex A & B. Smart Divert codes corrected in Annex B.
SIN 354 Issue 4.1	December 2008	Annexes A & B – Supplementary Service availabilities updated on different types of exchange Direct Dialling In (DDI) product withdrawn 1471 Extra product withdrawn Meter Pulse Facility product withdrawn Night Busying (30k Ohm Key Control) product withdrawn Three Way Calling added to Service Descriptions Also minor editorial amendments throughout SIN
SIN 354 Issue 4.2	February 2009	Index updated to include white labelled Wholesale 1571 basic messaging service as per BT Answer 1571 Charge Advice is a BT Retail specific product and not available via WLR.
SIN 354 Issue 4.3	October 2015	SIN 353 removed from reference list. SIN 353 has now been withdrawn. SINet site reference changed from http://www.sinet.bt.com to http://www.btplc.com/sinet/
SIN 354 Issue 5	December 2016	Index and description updated to include Choose to Divert and Caller Redirect.
SIN 354 Issue 5.1	February 2018	Typographical errors fixed in Section 4.25. C2D interworking statement added to Section 4.5.
Sin 354 Issue 6	June 2018	Index updated and service description (Section 4) extended to include Basic Call Restriction (BCR), Premium Call Restriction (PCR) and Indirect Access Call Barring (IACB). Reference added in Section 4.8 to IACB. Minor typographical errors fixed in Section 4.

Sin 354 Issue 7	July 2020	Removed BT Chargecard and 1571 Extra services from Section 4 as the services have been withdrawn. Removed Charge Advice from Section 4 as the service is not available in WLR3 lines. Removed BT In Contact from Section 4 as the service is not a WLR3 service. Section 4 extended to include Raw Call Data, Remote Call Forwarding, Temporary Out of Service, Route to 15x and Route to Credit Control services. Annex A updated to remove Charge Advice and 1471 Extra. Section 5 updated.
Issue 7.1	September 2020	Changes to branding, from BT to Openreach including changes to reflect new Openreach SIN site and Openreach SIN email address
Issue 7.2	April 2021	Index and service description (Section 4) extended to include 159 Bank Fraud Reporting service. Glossary updated to include CPS and WCLA acronyms.
Issue 7.2	May 2022	Annual Review Completed
Issue 7.2	June 2023	Annual Review – branding and font changes only – issue remains unchanged.
Issue 7.3	February 2025	Text added to Section 1 announcing the withdrawal of the supplementary services provided on PSTN analogue interfaces by end January 2027.

ANNEX A: SUPPLEMENTARY SERVICES OPERATING CODES FOR SINGLE LINES

The following table lists service codes and their availability on the different BT exchange types (note that the services can be accessed mid-call by using Recall):

Feature	Activation Codes			System X (SX)	AXE10 (SY)	UXD5	21C	Notes
	ON	OFF	Check					
Repeat Last Call	**0			✓	✓	✗	✗	Automatically sets up call to last dialled number.
Ring Back Inhibit	*02*37#	#02*37#	*#02*37#	✓	✓	✓	✓	Prevents Ring Back requests from being placed against user's line.
Calling Line Identity -per call withhold	141[DN]	-	-	✓	✓	✓	✓	DN = national number
Calling Line Identity -per call release	1470[DN]	-	-	✓	✓	✓	✓	DN = national number
Caller Return	1471[3]	-	-	✓	✓	✓	✓	[3] = digit 3 may be entered when prompted to return the call.
Choose to Refuse	14258 (see note)	-	-	✓	✓	✓	✓	Refer to Section 4.13
1471 Erasure	1475	-	1471	✓	✓	✓	✓	

ANNEX A: SUPPLEMENTARY SERVICES OPERATING CODES FOR SINGLE LINES: cont.

The following table lists service codes and their availability on the different BT exchange types (note that the services can be accessed mid-call by using Recall):

Feature	Activation Codes			System X (SX)	AXE10 (SY)	UXD5	21C	Notes
	ON	OFF	Check					
Call Minder, BT Answer 1571 & Wholesale 1571	Admin provided	-	1571 See notes	✓	✓	✓ ✓	✓	Own line access – 1571 Call Minder Remote access – [DN], wait for Call Minder prompt, *[PIN]. DN = own national number.
Call Diversion – all calls.	*21*[DN]#	#21#	*#21#	✓	✓	✓	✓	DN = 'diverted to' national number
Anonymous Call Rejection	*227#	#227#	*#227#	✓	✓	✓	✓	
Caller Display	*234#	#234#	*#234#	✓	✓	✓	✓	UXD5 - The Caller Display service is available but cannot be controlled by activation codes.
Incoming Call Barring – all calls.	*261#	#261#	*#261#	✓	✓	✓	✓	
Outgoing Call Barring – cancelling all options	-	#34*[PIN]#	-	✗	✓	✓	✓	

ANNEX A: SUPPLEMENTARY SERVICES OPERATING CODES FOR SINGLE LINES: cont.

The following table lists service codes and their availability on the different BT exchange types (note that the services can be accessed mid-call by using Recall):

Feature	Activation Codes			System X (SX)	AXE10 (SY)	UXD5	21C	Notes
	ON	OFF	Check					
Outgoing Call Barring – almost all calls.	*341#	#341*[PIN]# (Note1)	*#34#	✓	✓	✓	✓	Note 1: SX: cancels all active options. SY, UXD5 and 21C: cancels Option 1 only.
Outgoing Call Barring – national, international and mobile.	*342#	#342*[PIN]#	*#34#	✓	✓	✓	✓	
Outgoing Call Barring – international.	*343#	#343*[PIN]#	*#34#	✓	✓	✓	✓	Includes calls to premium rate information services for SY.
Outgoing Call Barring – operator calls	*344#	#344*[PIN]#	*#34#	✓	✓	✓	✓	
Outgoing Call Barring – codes using * or #	*345#	#345*[PIN]#	*#34#	✓	✓	✓	✓	Excludes Call Barring operating code.
Outgoing Call Barring –premium rate information services.	*347#	#347*[PIN]#	*#34#	✓	✗	✓	✓	Refer to Outgoing "Call Barring – international" feature for SY (code *343#).

ANNEX A: SUPPLEMENTARY SERVICES OPERATING CODES FOR SINGLE LINES: cont.

The following table lists service codes and their availability on the different BT exchange types (note that the services can be accessed mid-call by using Recall):

Feature	**Activation Codes**			**System X (SX)**	**AXE10 (SY)**	**UXD5**	**21C**	**Notes**
	ON	**OFF**	**Check**					
Call Waiting	*43#	#43#	*#43#	✓	✓	✓	✓	To accept and toggle: Recall. Customers on UXD5s key Recall 2 to talk to the second caller and Recall 1 to return to the first caller.
Smart Divert – all calls.	*44*[PIN]*[DN1]*[DN2]#	#44*[PIN]*[number1]#	*#44*[PIN]*[number1]#	✓	✓	✓	✓	DN1 = own national number DN2 = 'diverted to' number
BT Ring Back	5	#37*[DN]# (Note 1) #37# (Note 2)	*#37*[DN]# (Note 1) *#37# (Note 2)	✓	✓	✓	✓	Note 1: Used to check/cancel Individual Ring Back Request. Note 2: Used to check/cancel all Ring Back Requests. DN = national number of previously set Ring Back request.
Code Calling – to store to dial	*51*[code]*[DN]# **[code]	#51*[code]#	*#51*[code]#	✓	✓	✗	✗	code = 3 to 29 for SX. code = 10 to 36 for SY. code = 3 to 9 for UXD5. DN= national number

ANNEX A: SUPPLEMENTARY SERVICES OPERATING CODES FOR SINGLE LINES: cont.

The following table lists service codes and their availability on the different BT exchange types (note that the services can be accessed mid-call by using Recall):

Feature	Activation Codes			System X (SX)	AXE10 (SY)	UXD5	21C	Notes
	ON	OFF	Check					
Single Reminder Call	*55*[hhmm]#	#55#	*#55#	✓	✓	✓	✓	hhmm = 24 hour clock
Regular Reminder Call.	*56*[hhmm]*[option]#	#56*[hhmm]*[option]# or #56# for all.	*#56#	✓	✗	✗	✗	hhmm = 24 hour clock option = 1 (Mon) to 7(Sun), 8 = Mon to Fri, 9 = Every day.
Call Diversion – on no reply	*61*[DN]#	#61#	*#61#	✓	✓	✓	✓	DN= 'diverted to' national number
Smart Divert – on no reply.	*64*[PIN]*[DN1]* [DN2]#	#64*[PIN]*[DN1]#	*#64*[PIN]*[DN1]#	✓	✓	✓	✓	DN1= own national number DN2= 'diverted to' national number
Smart Divert – on busy.	*65*[PIN]*[DN1]* [DN2]#	#65*[PIN]*[DN1]#	*#65*[PIN]*[DN1]#	✓	✓	✓	✓	DN1 = own national number DN2 = 'diverted to' national number.
Call Diversion – on busy and no reply.	*66*[DN]#	#66#	*#66#	✓	✗	✓	✗	DN = 'diverted to' national number
Call Diversion – on busy.	*67*[DN]#	#67#	*#67#	✓	✓	✓	✓	DN = 'diverted to' national number

ANNEX A: SUPPLEMENTARY SERVICES OPERATING CODES FOR SINGLE LINES: cont.

The following table lists service codes and their availability on the different BT exchange types (note that the services can be accessed mid-call by using Recall):

Feature	Activation Codes			System X (SX)	AXE10 (SY)	UXD5	21C	Notes
	ON	OFF	Check					
Three Way Calling – To toggle between To talk to both To end first call To end second call	R[DN] R2 R3 R5 R7	-	-	✓	✓	✓	✓	R = Recall, DN = 3rd party national number. R2 = Recall then digit 2, R3 = Recall then digit 3, R5 = Recall then digit 5, R7 = Recall then digit 7.
Choose to Divert 1572	Admin provided	-	-	✓	✓	✗	✓	Refer to section 4.21

ANNEX B: SUPPLEMENTARY SERVICES OPERATING CODES FOR MULTI-LINE GROUPS (MLG)

The following table lists service codes and their availability on the different BT exchange types:

Feature	Activation Codes			System X (SX)	AXE10 (SY)	UXD5	21C	Notes
	ON	OFF	Check					
Ring Back Inhibit	*02*37#	#02*37#	*#02*37#	✓	✓	✗	✓	For individual lines within a Multi-Line Group (MLG) with their own national number. Note: For AXE10 & 21C, where no individual national number exists, Ring Back Inhibit will be against main number.
Ring Back Inhibit	*03*37*KW#	*03*37*KW#	*03*37*KW#	✓	✗	✗	✗	System X - Used for Ring Back Inhibit against main number. KW = Keyword (PIN)
Call Diversion – all calls.	*121*[DN]#	#121#	*#121#	✓	✓	✓	✓	DN = 'diverted to' national number
Calling Line Identity -per call withhold	141[DN]	-	-	✓	✓	✓	✓	DN = national number
Calling Line Identity -per call release.	1470[DN]	-	-	✓	✓	✓	✓	DN = national number

ANNEX B: SUPPLEMENTARY SERVICES OPERATING CODES FOR MULTI-LINE GROUPS (MLG): cont.

The following table lists service codes and their availability on the different BT exchange types:

Feature	Activation Codes			System X (SX)	AXE10 (SY)	UXD5	21C	Notes
	ON	OFF	Check					
Call Diversion – on no reply	*161*[DN]#	#161#	*#161#	✓	✓	✓	✓	DN = 'diverted to' national number
Smart Divert – on no reply.	*164*[PIN]*[DN1]* [DN2]#	#164*[PIN]*[DN1]#	*#164*[PIN]*[DN1]#	✓	✓	✓	✓	DN1 = own national number DN2 = 'diverted to' national number.
Smart Divert – on busy.	*165*[PIN]*[DN1]* [DN2]#	#165*[PIN]*[DN1]#	*#165*[PIN]*[DN1]#	✓	✓	✓	✓	DN1 = own national number DN2 = 'diverted to' national number.
Call Diversion – on busy and no reply.	*166*[DN]#	#166#	*#167#	✓	✗	✓	✗	DN = 'diverted to' national number
Call Diversion – on busy.	*167*[DN]#	#167#	*#167#	✓	✓	✓	✓	DN = 'diverted to' national number
Incoming Call Barring – all calls.	*261*[PIN]#	#261*[PIN]#	*#261#	✗	✗	✓	✗	UXD5 - provided on first line.
Incoming Call Barring – all calls.	*262*[PIN]#	#262*[PIN]#	*#262#	✓	✓	✗	✓	
Outgoing Call Barring – almost all calls.	*351#	#351*[PIN]# (Note1)	*#35#	✓	✓	✗	✓	Note 1: SX: cancels all active options. SY, UXD5 and 21C: cancels Option 1 only.

ANNEX B: SUPPLEMENTARY SERVICES OPERATING CODES FOR MULTI-LINE GROUPS (MLG): cont.

The following table lists service codes and their availability on the different BT exchange types:

Feature	Activation Codes			System X (SX)	AXE10 (SY)	UXD5	21C	Notes
	ON	OFF	Check					
Outgoing Call Barring – national, international and mobile.	*352#	#352*[PIN]#	*#35#	✓	✓	✗	✓	
Outgoing Call Barring – international.	*353#	#353*[PIN]#	*#35#	✓	✓	✗	✓	For SY includes calls to premium rate information services.
Outgoing Call Barring – operator calls.	*354#	#354*[PIN]#	*#35#	✓	✓	✗	✓	
Outgoing Call Barring – codes using * or #	*355#	#355*[PIN]#	*#35#	✓	✓	✗	✓	Excludes Call Barring operating code.
Outgoing Call Barring – premium rate information services.	*357#	#357*[PIN]#	*#35#	✓	✗	✗	✓	Refer to Outgoing Call Barring – international for SY (code *353#).
Smart Divert – all calls.	*44*[PIN]*[DN1]* [DN2]#	#44*[PIN]*[DN1]#	*#44*[PIN]*[DN1]#	✓	✓	✓	✓	DN1 = own national number DN2 = 'diverted to' national number.
Night Interception for PBX groups	*471*[PIN]#	#471*[PIN]#	-	✓	✓	✗	✓	Incoming calls are routed to the BT Operator

ANNEX B: SUPPLEMENTARY SERVICES OPERATING CODES FOR MULTI-LINE GROUPS (MLG): cont.

The following table lists service codes and their availability on the different BT exchange types:

Feature	**Activation Codes**			**System X (SX)**	**AXE10 (SY)**	**UXD5**	**21C**	**Notes**
	ON	**OFF**	**Check**					
Night Busy service on PBX groups.	*472*[PIN]#	#472*[PIN]#	-	✓	✗	✗	✗	Pre-defined group of lines to be busied for incoming calls.
	472[PIN]*[NSB No]#	#472*[PIN]*[NSB No]#	*#472*[PIN]*[NSB No]#	✗	✓	✗	✗	NSB No = Busy list of pre-defined group of lines to be busied.
Code calling –				✓	✓	✗	✗	code = 3 to 29 for SX.
to store	*51*[code]*[DN]#	#51*[code]#	*#51*[code]#					code = 10 to 36 for SY.
to dial	**[code]	-	-					DN = national number

- END -